

RunShare

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<http://runsharedeploylinux.azurewebsites.net/>

Description

RunShare is a exercise tracking app for runners looking to share their passion for getting out and exploring with old friends and new connections. Runners can create and share details on trails, log their current runs, and create public or private messages to celebrate their journeys. RunShare is an evolving app that welcomes new ideas and will constantly be adding new features!



Features

- Unique logins that know your history and your running group with secure, hashed passwords
- Catalogs of both current Runner friends, as well as new contacts to link up with
- Trails catalog that can be searched for new adventures!
- Logging of run sessions that tracks trails, date, laps, distance, pace, and more!
- Comment system that has multiple features for applying comments as direct messages, comments on trails or run sessions as well as community or private messages.



Planning - User Stories

Tracking apps have gotten super complicated, and although useful, can sometimes be intimidating to new users. I wanted to create an app that was simply somewhere that people could go to track their progress and communicate with friends that shared a like mind.



Planning - Database

Utilizing MySQL, the database for RunShare starts with 4 basic tables: Runners, Trails, Comments, and RunSessions. Runners can be associated with other runners as friends through 2 tables: Friend Requests and Friends. Trails have 2 additional tables: Difficulty and Scenery ratings, so that there can be consensus ratings on each. Run Sessions have an additional table allowing multiple runners to be attached to a run session. Finally, Comments has an additional table allowing multiple runners to be attached to a comment, allowing for directed messaging via privacy setting on comment.



Technology Stack

- Language – Java with some JavaScript for navigation animation and live updating on certain templates
- Framework – Spring Boot/Maven
- Template engine – Thymeleaf
- Database engine – Hibernate/JPA
- Security – Spring Security/Jsoup
- Styling – Bootstrap/CSS
- Deployment – Azure App Service/GitHub Actions



Demo



What I Learned

- Azure Deployment systems, including setting Application Settings for secure usage of secrets in Deployment/Development environments, as well as creating a CI-CD pipeline through GitHub.
- ThymeLeaf techniques for template alteration through controller inputs such as Path Variables or Request Parameters
- Sanitizing inputs through use of the JSoup library
- Creation of REST controller as well as JPA inquiries
- Animations utilizing CSS Keyframes
- Responsive design for mobile device using Media Screen and Orientation



What's Next

- Improving MapQuest API usage and Runner/Trail addresses to provide turn by turn directions to trailheads
- Integrating Oauth2 user login for more security and ease of use, as well as eliminating the need for storing passwords in DB
- More Search integration on Trail/Runner/Run session catalogs for enhanced discoverability for users

